



## RAILWAY EXTENSION—GOVERNMENT INTERFERENCES AGAINST.

A letter has just been published by G. H. Long, Esq., addressed to the Right Hon. W. E. Gladstone, M.P., President of the Board of Trade, No. 10, "On the Importance, in a National Political View, of Railway Extension, and the Encouragement which should be afforded by Government to such Undertakings." The writer states that the circumstances which first drew his attention to the subject, is the striking difference in the situation of French and English Railways. In Great Britain there are expressed above 100 railways, of which the greatest are state-owned, while every railway in France, with one or two exceptions, is a private enterprise; for five years, however, a single line of railway has received the sanction of the British Parliament, while during that period nearly every one in France has been created, and instead of difficulty in procuring money, there has been eager competition among English capitalists to advance railways when required. He considers the failure of so many of our English railways to the enormous expenses in promoting the Act of Incorporation, to the absurd Standing Orders of the House of Commons, comprising 10 per cent. to be paid into the Court of Chancery before an Act can be obtained, and also the complication to arrange money roads by bridges or viaducts, either over or under the same, which, of itself, is many liabilities, and as a perfect prohibition, and in all, entails enormous and undue expenses to deep cuttings and high embankments which otherwise could not be found. In noticing foreign railways, from Mr. Long's observations, it appears that in Belgium the railway system may be regarded as nearly complete, the whole country is intersected in one comprehensive scheme, and each town of the smallest note is placed in direct railway communication with every town and district in the kingdom; the whole do not pay more than 5 per cent., but the Government, however, wisely regard railways not merely as a subject of revenue, but look for a return in the increased prosperity of the country. After describing the railway system in France, Prussia, and Austria, with America, which now possesses 6000 miles completed, and thousands of miles more in construction, he proceeds to show the effect of these railways on this country, and which, perhaps, convinces more clearly than any other argument, the absolute necessity of keeping up a cheap and rapid intercourse with every part of the kingdom, as the only means of preserving our manufacturers, and placing us in a position to compete with the rapid strides of those of the two continents—the alteration of the foreign tariff is an instructive commentary. The Zoll-vertrag, or Union of Customs, which includes Prussia, France, Bavaria, Wurtemberg, Baden, and nearly all the states of the German Confederation, a few years since, when these states possessed no railways, and had similar means of intercommunication, imposed a uniform duty only on British merchandise, proportionate to the value of the goods; but, now, when the German system of railways is so advanced, the duties are levied on weight, without reference to value, so that a ton, of the best iron and the most valuable pays the same amount of duty, which operates, as it was intended, as a perfect protection, as the following number of charges will show:

Per carriage—113*lb.*

	Former duty.	Present duty.
Woolen manufacturer, coarse	40 3 0	40 10 0
Cotton manufacturer, plain	0 0 0	7 10 0
Linen, mixed with cotton	0 1 0	7 10 0
<i>etc.</i>	0 13 0	10 10 0

The American tariff affords an equally striking instance. In 1822 they possessed only 175 miles of railroads, and even then they attempted to levy high duties on foreign goods, with a view to prohibition, but for want of sufficient facility of transport, it was found their manufacturers could not compete with ours, and they were gradually reduced by Mr. Clay's bill, until they were of a uniform rate of 10 per cent. of value, but in 1842, ten years afterwards, possessing some 6000 miles of railways, the scale of import duties was allayed—now, on cotton goods they were raised to 30 per cent., or 30 per cent. on the former duty, and on woolens to 30 per cent., or 100 per cent. ad valorem to the former charge. This increase has been severely felt in our manufacturing districts, and the increased demand for British goods in the East, this time, than compensates for the falling off in the American market. It is, therefore, evident that foreign Governments know the importance of railroads, that trade and manufactures depend on facilities of communication, and that as foreign railways are extended, tariffs, injurious to the interests of Great Britain, make substantial progress. Having thus shown the effect of railways generally on the social system, and how small a measure of Government patronage would be sufficient to retain our empire, applied to their further development in this country, he proceeds to make the following propositions for the consideration of the Government:—1. Alteration of the Standing Order, requiring deposit of 10 per cent., if not abolished at least modified to the same scale as the House of Lords, which requires a deposit of only 5 per cent. 2. Alteration of Standing Orders as to crossing roads, adding substantially to the cost, by the necessary formation of deep cuttings and long embankments, to enable a line to go under or over a common road. 3. Abolition of new taxes from taxation, or being an entire new tax on the poor, who are thereby prevented attaining the benefits of railway communication. 4. The extension of existing railways by the formation of branch lines, which would first reduce the cost per mile of locomotive-power, it having been abundantly proved that the expense of working a railway diminishes as the length increases.

## PERFORMANCES OF HILL'S STREAM-CARRIAGE.

It is almost impossible to convey the idea of any mechanical improvement to those who do not witness its particular action and effect, especially in the case of an invention accompanying what all other progress has hitherto failed in; but still the new carriage, now being constructed, proves to demonstrate the value of Mr. Hill's invention. The following slight sketch of past performances may be of service. In 1840, after running a few miles to adjust machinery, the carriage, a horse, building Evans' patent, was started on May 22, for Liverpool, and, leaving Chelmsford—gates, 11 a.m., arrived at the destination at eleven o'clock before noon—thus performing its first journey of 100 miles in three hours and forty minutes, including stops, although much retarded by the irregularities of all the men employed about it in running. It reached Head Cross hill, a rise of eight miles as fast, descending, with ease, a road which left Liverpool City sixteen miles before it. The journey up was accomplished in three hours and a half, but it was thought by the proprietors that it lost its power in the ascent, and to test the merit of the difference, apparently, to its owners, a road should be selected the most hilly that could be found, and it was, with confidence, so asserted that for the accomplishment of this design, the line to Hastings through Ticefield, Wiverton, and Rye, was selected. The carriage, a horse, building Evans' patent, was started on May 22, for Hastings, and, leaving Chelmsford—gates, 11 a.m., arrived at the destination at eleven o'clock before noon—thus performing its first journey of 100 miles in three hours and forty minutes, including stops, although much retarded by the irregularities of all the men employed about it in running. It reached Head Cross hill, a rise of eight miles as fast, descending, with ease, a road which left Hastings City sixteen miles before it. The journey up was accomplished in three hours and a half, but it was thought by the proprietors that it lost its power in the ascent, and to test the merit of the difference, apparently, to its owners, a road should be selected the most hilly that could be found, and it was, with confidence, so asserted that for the accomplishment of this design, the line to Hastings through Ticefield, Wiverton, and Rye, was selected.

On June 20th, the first trip was made to Seven Dials, the distance (Twenty-one miles) being increased to two hours and eight minutes, including stops, and leaving the hills of Sevenoaks, Merton's Cross, and Seven Dials, in an instant. The carriage, composed of the power which was at its command, performed a trip to Ticefield, Wiverton, which was accordingly made on the 20th July following. The distance (thirty-two miles) to the Chelmsford Hotel was run over in two hours and fifteen minutes, according, in addition to the hills to Sevenoaks, the rise to the Sevenoaks Crossroads, and the Chelmsford Hill, part of Ticefield Hill, the latter of a gradient of one foot in eight. This journey, and the tenth trip of its performances, excited so much admiration, that Mr. Hill, having performed the last accomplishments in his power, applied with the carriage to the opening of the 3d of October following, and, at Ticefield, Wiverton, and Rye, arrived in Hastings at 8*o* clock past 1 p.m., accomplishing the journey in two hours and thirty-five minutes, including thirty minutes of loss caused by irregularities on the part of the atmosphere. After running four hours there, the carriage was effected to darkness, and in the heat of a scorching sun and rain. Then the power in Hastings and back was performed in one short excess of day, the distance (four miles back and forth) was increased to half the time of the journey. The last time the attempt was made it was accomplished. Second trip to Hastings and Rye, and made rapid progress to Seven Dials, where, during which the carriage, notwithstanding a speed of fifteen miles an hour, arriving stoppage, and twelve and one-half hours of darkness. After running and making the same excess, the creation of the Merton's Crossroads Hill, with Mr. Whigham, their engineer, and stops during the hours of darkness, were composed in the same carriage to Hastings and back in the route of Sevenoaks Hill, and they have addressed a letter to Mr. Hill, in order of unqualified approbation. The creation of the Sevenoaks Stream-Carriage Committee, the proprietors of this invention, desire to represent to these gentlemen of a similar name, that they have rejected it to the most severe terms in their power, and its performances fully justify their estimate of its merits as a superior mechanical apparatus, as the invention of improved trains on the range of roads, as a safe investment for property.

G. H. Long, M.P., Chelmsford.

**Stream-Carriage, June 20th.**—On before mentioned that an engineer at Hastings had declined a contract for the carriage. The engineer is to be made a life-peer on the Committee. Report to consider (says the engineer) on conditions of the carriage, between the engineer and those who possess a horse with his name. The horse which being found to have apparently wholly passed to the hands of a customer, it is difficult to know the steps taken to make the carriage suitable. (It when comes from the engineer's hands.) It is to be given to the engineer to make the carriage suitable for the carriage, and the engineer to have the carriage to the engineer's name. The horse which being found to have apparently wholly passed to the hands of a customer, it is difficult to know the steps taken to make the carriage suitable. (It when comes from the engineer's hands.) 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by a gas drift parallel with the fossils, and at right angles with the fissures from whence the gas is discharged, while the light carbonated hydrogen, by a natural law, extends the inclined plane into the free atmosphere above. I have now shown, I hope, that I understand Mr. Ryan's plan; and it must naturally triumph. He has been guided by the example of truth, found in Nature's world of numbers—while many others have been engrossed in kindling their dimly taper at their neighbour's torch.

—J. MURRAY.

THE MINING INTEREST—THE METAL TRADE.

SIR.—Your correspondent, "H. E.," after having informed his intention to withdraw from the contest in which he had engaged, has resumed his pen for the purpose, one would suppose, of trying how ridiculous he could make himself to appear; and certainly, in this instance at least, it has been most eminently successful. He has now had recourse to an expedient, which is often resorted to by parties who do not possess sufficient evidence to acknowledge defeat—that of substituting names for argument, and of making use of low scurrility, with the view of silencing an opponent, and in this respect he will prove equally successful. I should deem it but a waste of time, and a sacrifice of character and responsibility to continue a correspondence with a person who has shown so little respect for himself, and who could make up his mind to publish such a contemptuous letter as that which appeared in the Journal of the 29th inst. I would not have noticed it at all, but that it is a difficult matter at times to decide which would be the best policy to adopt—silence or not; and as he appears to contemplate some further publications upon the matter that has been at issue between us, I am anxious that my future silence upon any thing he may advance, may be attributed to no other cause than that of despair.—London, Jan. 24.

R. W.

THE MINING INTEREST—THE METAL TRADE.

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"H. E." is afraid of facts and unfeelingly "happens to be in wrong" but company, for in the very reason that he failed to notice his expression of "unfeelingly," he condescends to his very "whores." If there is any difference to us, and "H. E." means are good, "H. E." is in error of having so much of his knowledge based on an expression upon a "public subject." Why not argue on "fables and fictions," without troubling in particular? As we were to write to the truth, we cannot likely to notice much argument from such questionable compositions as are frequently passed between parties in their correspondence in the Mining Journal. I mean, however, give you credit for endeavouring to check what is, we could not suppose, even consider any difficulties—and I hope your other efforts may prove more successful than past past fails.

—W.

SAFETY LAMPS, &c.

SIR.—I can easily verify the account given by your correspondent, as to the defective state and weakness touching the "Davy lamp," in the vicinity of Wigan, Lancashire. Those which I happened to see were much corroded, and, in more than one instance, I observed several of the metal broken. In one office, I perceived an Upton and Roberts's lamp; it seems, however, never to have conformed to that, that this safety lamp, was constructed for use, not for mere exhibition. I was often told that copper wire gauge was preferred to iron, because less susceptible of corrosion, and they seemed to be entirely ignorant, that, eighteen years ago, I had proved that the flame of fire damp rapidly dissolved copper wire gauge, and to which circumstance, indeed, I had, on one occasion, nearly fallen a victim—viz., when using a copper gauge Davy lamp in the mine. From the very summary way in which Mr. Davis disposes of Mr. Ryan's new method of freezing the mine of "fire damp," I am sorry to conclude, we are not to count on his aid in the great work of the amelioration of the condition of mining and the mines—"a consummation so devoutly to be wished."

—J. MURRAY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR.—Your correspondent, "H. E.," after having informed his intention to withdraw from the contest in which he had engaged, has resumed his pen for the purpose, one would suppose, of trying how ridiculous he could make himself to appear; and certainly, in this instance at least, it has been most eminently successful. He has now had recourse to an expedient, which is often resorted to by parties who do not possess sufficient evidence to acknowledge defeat—that of substituting names for argument, and of making use of low scurrility, with the view of silencing an opponent, and in this respect he will prove equally successful. I should deem it but a waste of time, and a sacrifice of character and responsibility to continue a correspondence with a person who has shown so little respect for himself, and who could make up his mind to publish such a contemptuous letter as that which appeared in the Journal of the 29th inst. I would not have noticed it at all, but that it is a difficult matter at times to decide which would be the best policy to adopt—silence or not; and as he appears to contemplate some further publications upon the matter that has been at issue between us, I am anxious that my future silence upon any thing he may advance, may be attributed to no other cause than that of despair.—London, Jan. 24.

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